

#8



SEQUENCE LISTING

<110> Watowich, Stanley J.
Weaver, Scott C.
Davey, Robert A.

<120> Drug Discovery Methods

<130> 265.00260101

<140> US 09/981,286

<141> 2001-10-15

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<151> 2000-10-13

<160> 36

<170> PatentIn version 3.0

<210> 1

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<212> PRT

<213> VENEZUELAN EQUINE ENCEPHALITIS VIRUS

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Val Met Lys Leu Glu Ser Asp Lys Thr Phe Pro Ile Met Leu Glu Gly
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Lys Ile Asn Gly Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro
20 25 30
Met His Val Glu Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys
35 40 45
Thr Lys Lys Ala Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln
50 55 60

Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
 65 70 75 80
 Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
 85 90 95
 Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
 100 105 110
 Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
 115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Glu Lys Gly
 130 135 140
 Val Thr Val Lys Tyr Thr Pro Glu Asn Cys Glu Gln Trp
 145 150 155

<210> 2

<211> 11

<212> PRT

<213> ARTIFICIAL

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<223> Cell-permeant polypeptide

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Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg
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<210> 3

<211> 16

<212> PRT

<213> ARTIFICIAL

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Arg Gln Ile Lys Ile Trp Phe Gln Asn Arg Arg Met Lys Trp Lys Lys
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<223> Cell-permeant polypeptide

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Arg Gln Ile Lys Ile Trp Phe Pro Asn Arg Arg Met Lys Trp Lys Lys
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<211> 16

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Arg Gln Pro Lys Ile Trp Phe Pro Asn Arg Arg Pro Lys Trp Lys Lys
1 5 10 15

<210> 6

<211> 525

<212> DNA

<213> ARTIFICIAL

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<223> Nucleotide sequence encoding tat-CCD

<400> 6

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acgttcccaa tcatgttggg agggagata aacggctacg cttgtgtggt cggaggggag	120
ttattcaggc cgatgcatgt ggaaggcaag atcgacaacg acgttctggc cgcgcttaag	180
acgaagaaag catccaaata cgatcttgag tatgcagatg tgccacagaa catgcggggc	240
gatacattca aatacaccca tgagaaaccc caaggctatt acagctggca tcatggagca	300
gtccaatatg aaaatgggcg tttcacggtg ccgaaaggag ttggggccaa gggagacagc	360
ggacgaccca ttctggataa ccagggacgg gtggtcgcta ttgtgctggg aggtgtgaat	420
gaaggatcta ggacagccct ttcagtcgtc atgtggaaca agcttggatc ttctctcgag	480
ggagttaccg tgaagtatac tccggagaac tgcgagcaat ggtaa	525

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<211> 169

<212> PRT

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<223> Amino acid sequence of tat-CCD

<400> 7

Met Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Val Met Lys Leu
1 5 10 15
Glu Ser Asp Lys Thr Phe Pro Ile Met Leu Glu Gly Lys Ile Asn Gly
20 25 30
Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro Met His Val Glu
35 40 45
Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys Thr Lys Lys Ala
50 55 60
Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln Asn Met Arg Ala
65 70 75 80
Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly Tyr Tyr Ser Trp
85 90 95
His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe Thr Val Pro Lys
100 105 110
Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile Leu Asp Asn Gln
115 120 125
Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn Glu Gly Ser Arg
130 135 140
Thr Ala Leu Ser Val Val Met Trp Asn Glu Lys Gly Val Thr Val Lys
145 150 155 160
Tyr Thr Pro Glu Asn Cys Glu Gln Trp
165

<210> 8

<211> 124

<212> PRT

<213> BOS TAURUS

<400> 8

Lys Glu Thr Ala Ala Ala Lys Phe Glu Arg Gln His Met Asp Ser Ser
1 5 10 15

Thr Ser Ala Ala Ser Ser Ser Asn Tyr Cys Asn Gln Met Met Lys Ser
 20 25 30
 Arg Asn Leu Thr Lys Asp Arg Cys Lys Pro Val Asn Thr Phe Val His
 35 40 45
 Glu Ser Leu Ala Asp Val Gln Ala Val Cys Ser Gln Lys Asn Val Ala
 50 55 60
 Cys Lys Asn Gly Gln Thr Asn Cys Tyr Gln Ser Tyr Ser Thr Met Ser
 65 70 75 80
 Ile Thr Asp Cys Arg Glu Thr Gly Ser Ser Lys Tyr Pro Asn Cys Ala
 85 90 95
 Tyr Lys Thr Thr Gln Ala Asn Lys His Ile Ile Val Ala Cys Glu Gly
 100 105 110
 Asn Pro Tyr Val Pro Val His Phe Ala Ala Ser Val
 115 120

<210> 9

<211> 37

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

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37

<210> 10

<211> 42

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 10

gaattcggat cctcattacc attgctcgca gttctccgga gt

42

<210> 11

<211> 6

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<223> A variable region amino acid sequence

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<223> Any amino acid

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<211> 477

<212> DNA

<213> VENEZUELAN EQUINE ENCEPHALITIS VIRUS

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aacgacgttc	tggccgcgct	taagacgaag	aaagcatcca	aatacgatct	tgagtatgca	180
gatgtgccac	agaacatgcg	ggccgataca	ttcaaataca	cccatgagaa	acccaaggc	240
tattacagct	ggcatcatgg	agcagtccaa	tatgaaaatg	ggcgtttcac	ggtgccgaaa	300
ggagttgggg	ccaagggaga	cagcggacga	cccattcttg	ataaccaggg	acgggtggtc	360
gctattgtgc	tgggaggtgt	gaatgaagga	tctaggacag	ccctttcagt	cgatcatgtg	420
aacgagaagg	gagttaccgt	gaagtatact	ccggagaact	gcgagcaatg	gtaatga	477

<210> 13

<211> 43

<212> DNA

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<210> 14

<211> 33

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ctagctaagc ttgttccaca tgacgactga aag

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<210> 15

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<212> DNA

<213> ARTIFICIAL

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<400> 15
ctagctgcgg ccgctcatta ccattgctcg cagttc

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<210> 16

<211> 47

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<213> ARTIFICIAL

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<400> 16
agctagaagc ttggatcttc tctcgaggga gttaccgtga agtatac

47

<210> 17

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<212> DNA

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<223> Primer

<400> 17

gatcctcgag agaagatccg gatccgttcc acatgacgac tgaaagggt 50

<210> 18

<211> 51

<212> DNA

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<400> 18

gatcgaattc caccagcaga atcgacatat gtacggtcgt aaaaaacgtc g 51

<210> 19

<211> 27

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<222> (15)..(16)

<223> A, T, G, or C

<400> 19

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<210> 20

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<212> DNA

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<400> 20
accaccggaa

10

<210> 21

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<400> 21
tcgaggaac cacc

14

<210> 22

<211> 14

<212> DNA

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<400> 22
agctggaac cacc

14

<210> 23

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<222> (15)..(16)

<223> A, T, G, or C

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<400> 24
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<222> (16)..(17)

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<222> (20)..(21)

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41

<210> 27

<211> 19

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<400> 27
cgatctcgag ggaaccatc

19

<210> 28

<211> 57

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<222> (19)..(20)

<223> A, T, G, or C

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<222> (22)..(23)

<223> A, T, G, or C

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<223> A, T, G, or C

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<222> (28)..(29)

<223> A, T, G, or C

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<222> (31)..(32)

<223> A, T, G, or C

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<222> (34)..(35)

<223> A, T, G, or C

<400> 28

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<210> 29

<211> 21

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 29

tggttctcta gaaactgctg a

21

<210> 30

<211> 18

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

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<222> (1)..(2)

<223> A, T, G, or C

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<222> (4)..(5)

<223> A, T, G, or C

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<222> (7)..(8)

<223> A, T, G, or C

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<222> (10)..(11)

<223> A, T, G, or C

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<222> (13)..(14)
<223> A, T, G, or C

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<222> (16)..(17)
<223> A, T, G, or C

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18

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<211> 503
<212> DNA
<213> ARTIFICIAL

<220>
<223> Adaptein-1 nucleotide sequence

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aacgacgttc tggccgcgct taagacgaag aaagcatcca aatacgatct tgagtatgca 180
gatgtgccac agaacatgcg ggccgataca ttcaaataca cccatgagaa accccaaggc 240
tattacagct ggcatcatgg agcagtccaa tatgaaaatg ggcgtttcac ggtgccgaaa 300
ggagttgggg ccaagggaga cagcggacga ccattcttg ataaccaggg acgggtggtc 360
gctattgtgc tgggaggtgt gaatgaagga tctaggacag ccttttcagt cytcatgtgy 420
aacaagcttt ctccacatta tgctcaactc gagggagtta ccgtgaagta tactccggag 480
aactgcgagc aatggtaatg agc 503

<210> 32
<211> 503
<212> DNA
<213> ARTIFICIAL

<220>

<223> Adaptein-2 nucleotide sequence

<400> 32

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tacgcttgtg tggtcggagg gaagttattc aggccgatgc atgtggaagg caagatcgac      120
aacgacgttc tggccgcgct taagacgaag aaagcatcca aatacgatct tgagtatgca      180
gatgtgccac agaacatgcg ggccgataca ttcaaataca cccatgagaa accccaaggc      240
tattacagct ggcatcatgg agcagtccaa tatgaaaatg ggcgtttcac ggtgccgaaa      300
ggagttgggg ccaagggaga cagcggacga cccattctgg ataaccaggg acgggtggtc      360
gctattgtgc tgggaggtgt gaatgaagga tctaggacag ccctttcagt cgtcatgtgg      420
aacaagctta gaagcggtag tcaatggctc gagggagtta ccgtgaagta tactccggag      480
aactgcgagc aatggtaatg agc                                          503
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<210> 33

<211> 165

<212> PRT

<213> ARTIFICIAL

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<223> Adaptein-1 amino acid sequence

<400> 33

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Lys Ile Asn Gly Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro
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Met His Val Glu Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys
35        40        45
Thr Lys Lys Ala Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln
50        55        60
Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
65        70        75        80
Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
85        90        95
Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
100       105       110
Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
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115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Lys Leu Ser
 130 135 140
 Pro His Tyr Ala Gln Leu Glu Gly Val Thr Val Lys Tyr Thr Pro Glu
 145 150 155 160
 Asn Cys Glu Gln Trp
 165

<210> 34

<211> 165

<212> PRT

<213> ARTIFICIAL

<220>

<223> Adaptein-2 amino acid sequence

<400> 34

Val Met Lys Leu Glu Ser Asp Lys Thr Phe Pro Ile Met Leu Glu Gly
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 Lys Ile Asn Gly Tyr Ala Cys Val Val Gly Gly Lys Leu Phe Arg Pro
 20 25 30
 Met His Val Glu Gly Lys Ile Asp Asn Asp Val Leu Ala Ala Leu Lys
 35 40 45
 Thr Lys Lys Ala Ser Lys Tyr Asp Leu Glu Tyr Ala Asp Val Pro Gln
 50 55 60
 Asn Met Arg Ala Asp Thr Phe Lys Tyr Thr His Glu Lys Pro Gln Gly
 65 70 75 80
 Tyr Tyr Ser Trp His His Gly Ala Val Gln Tyr Glu Asn Gly Arg Phe
 85 90 95
 Thr Val Pro Lys Gly Val Gly Ala Lys Gly Asp Ser Gly Arg Pro Ile
 100 105 110
 Leu Asp Asn Gln Gly Arg Val Val Ala Ile Val Leu Gly Gly Val Asn
 115 120 125
 Glu Gly Ser Arg Thr Ala Leu Ser Val Val Met Trp Asn Lys Leu Arg
 130 135 140
 Ser Gly Thr Gln Trp Leu Glu Gly Val Thr Val Lys Tyr Thr Pro Glu
 145 150 155 160
 Asn Cys Glu Gln Trp
 165

<210> 35

<211> 58

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 35

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<210> 36

<211> 42

<212> DNA

<213> ARTIFICIAL

<220>

<223> Primer

<400> 36

gaattcggat cctcattacc attgctcgca gttctccgga gt 42